A REVISION OF THE TRIBE COLPURINI (HETEROPTERA: COREIDAE) FROM THE FIJI ISLANDS

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Abstract.—A revision of the tribe Colpurini (Coreidae) from the Fiji Islands is presented. Altogether, three genera and six species are recorded, among them are one new genus (*Monasavuhygia*) and four new species (*Brachylybas delgadoi, B. taveuni, B. vanua,* and *Monasavuhygia cordata*). New localities are given for *Acarihygia fijiana* Brailovsky and *Brachylybas variegata* (Le Guillou). The adult abdomen and male and female genitalia are illustrated, and a key is provided for the known species.

Key Words: Coreidae, Colpurini, Fiji, Monasavuhygia, Brachylybas, Acarihygia

This contribution summarizes knowledge of the tribe Colpurini (Heteroptera: Coreidae) for the Fijian Islands, bringing together information from the literature and from previously unstudied collections.

The Fijian Colpurini have never been revised. The first species recorded were by Le Guillou (1841), who described *Gonocerus* variegatus, which was later transferred by Stål (1870) into the new genus Brachylybas. Kirkaldy (1908) studied the Fijian Hemiptera giving new records for *B. variegata*. Brailovsky (1993) described Acarihygia fijiana, and Brailovsky and Martínez (1994) revised Brachylybas and redescribed and gave new distribution records for *B. variegata*.

In this paper I include all known species of Colpurini from Fiji Islands and describe one new genus and four new species.

The abbreviations used in this paper are: BMNH (The Natural History Museum, London); BPBM (Bernice P. Bishop Museum, Honolulu, Hawaii); QMBA (Queensland Museum, Brisbane, Australia); UNAM (Colección Entomológica del Instituto de Biología, Universidad Nacional Autónoma de México); USNM (National Museum of Natural History, Smithsonian Institution, Washington, D.C.).

All measurements are given in millimeters.

KEY TO THE FIJIAN COLPURINI

1. Ocelli absent: buccula rounded, without teeth or spine; micropterous 2 - Ocelli present; buccula with a subacute middle projection; macropterous 3 2. Neck elongate and straight; postocular tubercle absent; scutellar disc globose on each side. Monasavuhygia cordata, n. gen., n. sp. - Neck very short; postocular tubercle moderately protuberant; scutellar disc flat on each side Acarihygia fijiana Brailovsky 3. Male genital capsule with the posteroventral margin straight across (Fig. 11); gonocoxae I broad, and in lateral view with lower third strongly protruding into large lobes (Figs. 12-13); apical margin of corium with inner third deeply and broadly concave Brachylybas vanua, n. sp. - Male genital capsule with the middle third of the posteroventral margin exposed in two short arms or tubercles, separated along the middle line by deep longitudinal cavity (Figs. 5, 8); gonocoxae I slender, and in lateral view with the lower third rounded and barely exposed (Figs. 7, 10); apical margin of corium almost

straight, or very faintly concave near mesal end

4.	Abdominal sternite VI of the male clearly con-
	stricted at the midline; dorsal abdominal seg-
	ments VI to IX of the female strongly bent
	downward in straight line; abdominal sternite
	V to VII of the female clearly constricted at
	the midline
	Brachylybas variegata (Le Guillou)
-	Abdominal sternite VI of the male and V to
	VII of the female uniformly developed; dorsal
	abdominal segments VI to IX of the female
	almost straight 5
5.	Body stout, ovate; rostrum long, reaching ab-
	dominal sternite VII; scutellar disc with the
	arms of the T-shaped mark strongly elevated
	Brachylybas taveuni, n. sp.
-	Body oblong, not stout; rostrum short reaching
	only abdominal sternite V; scutellar disc with
	the arms barely elevated
	Brachylybas delgadoi, n. sp.

Acarihygia Brailovsky

Acarihygia Brailovsky, 1993: 435

The genus is best diagnosed by the following set of characters: ocelli absent, tylus apically globose, buccula rounded without teeth or spines, scutellum triangular with rounded apex, abdomen strongly convex dorsally, and female abdominal sternite VII without plica or fissura. Parameres: Figs. 22–23.

The genus was recently described by Brailovsky (1993) and includes only one species.

Type species.—*Acarihygia fijiana* Brailovsky.

Acarihygia fijiana Brailovsky (Figs. 1, 22–23)

Acarihygia fijiana Brailovsky, 1993: 436

Description.—Given by Brailovsky (1993). The only additional information is the shape of the parameres (Figs. 22–23).

Known distribution.—Fiji, Viti Levu Isl., 2–10 km., South of Nandarivatu, Yayu (near Nandarivatu) and Nandarivatu.

Other material examined.—1 δ , 1 \circ , Fiji, Viti Levu, Nandarivatu Reserve, (850 m), 25–26 July 1987, G. Monteith and D. Cook; 1δ , 1φ , Fiji, Viti Levu, Nausori Highlands (600 m), 13 July 1987, G. B. Monteith; 1δ , Fiji, Viti Levu, Base of Mt. Victoria (650 m), 11 July 1987, G. B. and S. R. Monteith. (BPBM, QMBA, UNAM, USNM).

Brachylybas Stål

Brachylybas Stål, 1870. Ofv. Kong. Vetensk-Akad. 27: 653

Diagnosis.—This genus is most closely related to Agathyrna Stål and Acanthotyla Stål. The three genera have in common the presence of ocelli, a tylus projected as a short or large spine (except in B. vanua with apex truncate or bidentate), buccula with a median projection, antennal segment II the longest, and abdominal sternite VII of the female without plica or fissura. Agathyrna differs in having the femora armed ventrally; the other two genera are unarmed or have a few tubercles. In Acanthotyla the antenniferous tubercle has a short broad lobe externally, head quadrate and clearly wider than long, eyes substylate, and genae armed with a prominent tubercle. In Brachylybas Stål, the antenniferous tubercle as well as the genae are unarmed, the head pentagonal and clearly longer than wide and eyes hemispherical.

Generic redescription.-Head: Longer than wide, pentagonal, and dorsally slightly convex; antennal segment II the longest, segment III the shortest or equal than IV, and I always longer than IV; antennal segment I longer than maximum length of head; tylus projected in front of juga, upturned to form a small horn at apex or apically bifurcate; ocelli not raised; eyes hemispherical and protuberant; antenniferous tubercle unarmed, truncated; genae unarmed; mandibular plate unarmed; postocular tubercle prominent, globose; buccula elevated, short, not extending posteriorly beyond antenniferous tubercle, with subacute median projection; rostrum reaching anterior third of abdominal sternite V or

apex of the last abdominal segment; neck short.

Thorax: Pronotum wider than long, trapeziform; anterior lobe shorter than posterior lobe, each margin convexly rounded; collar present; frontal angles produced forward as small or medium conical teeth; humeral angles rounded, not exposed; posterolateral and posterior borders almost straight; calli weakly or clearly convex at each side, and separated along middle line by a deep or shallow longitudinal furrow; posterior disc with a pair of basal tubercles at each side. Discs of mesopleura and metapleura not strongly convex, and hardly visible dorsally.

Legs: Femora unarmed or with one or two rows of short tubercles; tibiae cylindrical and sulcate.

Scutellum: Triangular, wider than long; disc with a distinct T-shaped elevation, with anterior arms barely or strongly protruding; apex almost flat, subacute.

Hemelytra: Macropterous, extending to anterior margin of abdominal segment VI or almost reaching the apex of abdomen; apical corial margin straight throughout, or very faintly concave near apical third or with inner third deeply and broadly concave; membrane with a few of veins furcate.

Abdomen: Male: Connexival segments higher than margin of hemelytron at rest; posterior angles of each connexival segments complete, not extending on a short spine; dorsal segments I to VII always almost straight; abdominal sternite III to VII uniformly developed or abdominal sternite III to V and VII uniformly developed and VI constricted at midline. Female: Connexival segments similar to male; dorsal segments I to V straight, and VI to IX remarkably bent downward in straight line or dorsal segments I to IX almost straight; abdominal sternite III to VII uniformly developed, except posterior borders of sternite IV or IV and V that are weakly folded on midline or abdominal sternite III uniformly developed, sternite IV uniformly developed, except for its posterior border that is folded at midline, and sternite V to VII constricted at midline (Figs. 7, 10, 13, 16).

Male genitalia: Genital capsule: Simple, globose; posteroventral margin entire, transversely straight (Fig. 11) or with a median expansion bearing two short arms or tubercles separated along midline by deep longitudinal cavity (Figs. 5, 8, 14). Parameres. Base of body broad, internal and external margin subparallel, constricted near footlike apex, toe of extension elongate and slender (Figs. 26–27) or short (Figs. 24–25) and apically rounded.

Female genitalia: Abdominal sternite VII entire, without plica or fissura, and at middle third smooth or strongly emarginate. Genital plates. Gonocoxae I slender, enlarged dorsoventrally, straight, in caudal view with upper third opened and lower third closed, and in lateral view with external face almost straight and ventrally rounded and barely exposed (Figs. 9-10) or gonocoxae I slender, enlarged dorsoventrally, straight or obliquely straight, in caudal view almost entirely opened, and in lateral view with external face almost straight and not exposed (Figs. 15-16) or ventrally strongly exposed (Figs. 6-7) or gonocoxae I broad, enlarged dorso-ventrally, straight, in caudal view with upper third opened and lower third closed, and in lateral view external face with upper third straight and not exposed, and lower third noticeable protruding into large lobes (Figs. 12-13); paratergite VIII small, triangular, with visible spiracle; paratergite IX conspicuously enlarged, well developed and projected into middle space left by the gonocoxae I. Spermatheca: Bulb somewhat elongate, with duct relatively coiled, chamber elongate and anteriorly folded (Figs. 28-31).

This genus, as recently reviewed by Brailovsky and Martínez (1994), contained only one species, *B. variegata* (Le Guillou) from the Fiji Islands; now it is known to have four, with three of them herein described.

Type species.—*Gonocerus variegatus* Le Guillou.

Brachylybas variegata (Le Guillou) (Figs. 14–16, 24–25, 28–29)

Gonocerus variegatus Le Guillou, 1841: 262

- Brachylybas variegatus: Stål, 1870: 653
- Brachylybas variegatus: Stål, 1873: 67
- Brachylybas variegatus: Lethierry and Severin, 1894: 42
- Brachylybas variegatus: Kirkaldy, 1908: 352
- Brachylybas variegatus: Blöte, 1936: 33

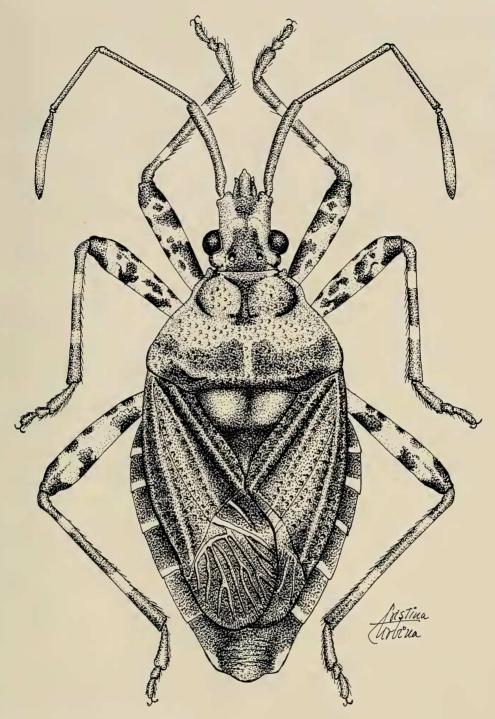


Fig. 2. Brachylybas taveuni, dorsal view.

Brachylybas variegata: Brailovsky and Martinez, 1994: 67

Redescription.—Given by Brailovsky and Martinez (1994). The following additional information is given:

Male.—Body oval to suboval, relatively stout. Head: Longer than wide, or wider than long; tylus apically with a spiny projection; rostrum reaching anterior third of abdominal sternite V or posterior third of VI. Pronotum: Calli weakly elevated, and irregularly rounded at each side. Scutellum: Arms of the T-shaped mark barely elevated. Hemelytra: Macropterous, almost reaching apex of last abdominal segment; apical corial margin straight throughout. Abdomen: Dorsal segments straight; abdominal sternite III to V and VII uniformly developed, and VI constrained at midline. Genitalia.-Genital capsule: Posteroventral margin with medial expansion bearing two short tubercles, separated along midline by a deep longitudinal furrow (Fig. 14). Parameres: Figs. 24 - 25.

Female.—Abdomen: Dorsal segments I to V straight and VI to IX strongly bent downward in horizontal line; abdominal sternite III uniformly developed, IV uniformly developed except for its posterior border that is folded at midline, and sternite V to VII constricted at midline (Figs. 15– 16). Spermatheca: Figs. 28–29.

Known distribution.—FIJI ISLANDS: Rewa. Vavao. Taveuni: Songgulu (10 km, SW of Waiyevo), and 4 km, NE of Somosomo. Viti Levu: Suva (Mt. Korobaba and Moronivia). Nakavuandra Range Rewasa (5 km, SE of Rakiraki). Namosi road (6 km, North of Queen's Bay). Sawani. Lami Saiyou (20 km., South of Nanduri). Naduruleulou-Waimaro (Cocoa Farm near Korovour). Savu-Savu. Tholoisuva. Nadarivatu (Mt. Lomalagi). Naitauvoli. Nausori. Ovalau: Levuka. TONGA ISLANDS: Eua (Hafu) and Ile Vavao.

Material examined.—2 δ , Fiji, Viti Levu (3 km, E. Monasavu Dam) (1000 m), 26 July 1987, Monteith and Cook; 3 δ , 1 \circ , Fiji, Viti Levu, Naviti Resort, 3–5 August 1994, H. and K. Brailovsky; 1 δ , Fiji, Viti Levu, Base of Mt. Victoria (650 m), 11 July 1987, G. B. and S. Monteith. 1 \Im , Fiji, Vanua, Loma Loma, 24 March 1922, H. S. Evans. 3 δ , 6 \Im , Fiji, Tamavua, June 1929, D. Stoner. 2 δ , 2 δ , Fiji, Nasurito, June 1923, Thomas. (BMNH, BPBM, QMBA, UNAM, USNM)

Notes.—This species can be easily distinguished by the constricted abdominal sternite VI of the male and V to VII of the female, as well as the strongly bent dorsal abdominal segments VI to IX of the female.

Brachylybas taveuni Brailovsky, New Species

(Figs. 2, 8-10, 26-27, 30-31)

Description.—Male: Head length 1.92; width across eyes 1.62; interocular space 0.88; interocellar space 0.51; preocular distance 1.16; postocular distance 0.26; length of antennal segments: 1, 1.96; II, 2.36; III, 1.64; IV, 1.80. Pronotum: Length of anterior lobe 0.96; length of posterior lobe 1.32; width of anterior lobe 2.20; width of posterior lobe 3.80. Scutellar length 1.80; width 2.08. Abdomen: Maximum width 4.12. Total body length 10.00.

Female: Head length 2.00; width across eyes 1.70; interocular space 0.94; interocellar space 0.43; preocular distance 1.26; postocular distance 0.28; length of antennal segments: I, 2.02; II, 2.32; III, 1.52; IV, 1.70. Pronotum: Length of anterior lobe 0.96; length of posterior lobe 1.50; width of anterior lobe 2.24; width of posterior lobe 4.00. Scutellar length 1.92; width 2.04. Abdomen: Maximum width 4.52. Total body length 10.55.

Male.—Dorsal coloration black to dark brown, with following areas pale yellow to yellowish brown; dorsal aspect of antenniferous tubercle, postocular tubercle, short longitudinal band running behind postocular tubercle, irregular spots scattered over pronotal disc, and apex of scutellum; antennal segments I and II shiny orange red, III shiny orange with basal join yellow, and IV

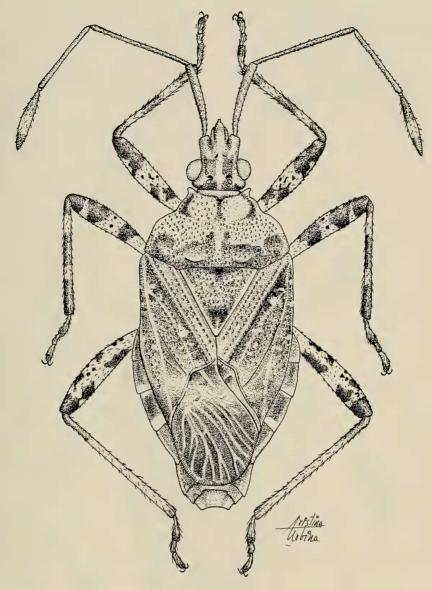


Fig. 3. Brachylybas delgadoi, dorsal view.

orange with middle third orange yellow to dirty yellow; tylus dark orange; hemelytral membrane dark ambarine with veins brown; connexival segments shiny orange red with posterior third yellow; dorsal abdominal segments black; following areas shiny orange red: anterolateral border of pronotum and costal margin of corium. Ventral coloration: Head black with following areas yellow: longitudinal and slender stripe running below eyes from antenniferous tubercle to neck, and rostral segments I to IV; thorax and abdomen dirty ocher yellow with following areas black: punctures, prosternum, mesosternum and metasternum, and area adjacent to metathoracic peritreme; genital capsule dark brown with orange reflections; anterior lobe of metathoracic peritreme yellow and posterior lobe orange brown; coxae shiny dark red with anterior

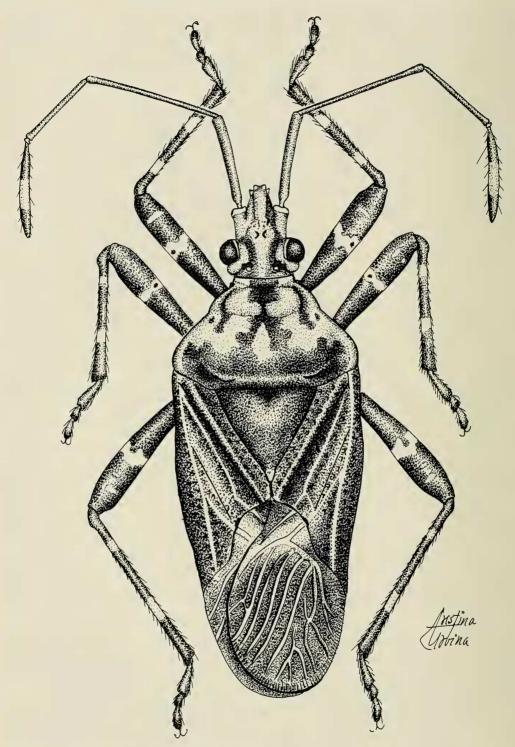


Fig. 4. Brachylybas vanua, dorsal view.

face mostly yellow; trochanters shiny yellow with orange red reflections; femora shiny brownish red with three or four irregular pale yellow rings; tibiae alternating two yellow rings with three red brown rings; tarsal segment I shiny orange, tarsal segment II yellow and III shiny orange with basal join yellow.

Male.-Body stout, ovate. Head: Tylus apically with a spine projection; rostrum reaching anterior or posterior third of abdominal sternite VII. Pronotum: Calli elevated, and irregularly rounded at each side. Scutellum: Arms of T-shaped mark strongly elevated. Hemelytra: Macropterous, extending to anterior margin of last abdominal segment; apical corial margin almost straight throughout. Abdomen: Dorsal segments I to VII straight; abdominal sternite III to VII uniformly developed. Genitalia.— Genital capsule: Posteroventral margin with a medial expansion, bearing two short tubercles, separated along midline by deep longitudinal furrow (Fig. 8). Parameres: Figs. 26–27.

Female.—Similar to male. Connexival segments VIII and IX shiny orange red with posterior third yellow; dorsal abdominal segments VIII and IX black; genital plates ocher with punctures red brown. Hemelytra: Extending to anterior third of abdominal tergite VI or VIII. Abdomen: Dorsal segments almost straight, not bent downward; abdominal sternite III to VII uniformly developed, except posterior border of sterna IV and V which are weakly folded; middle third of abdominal sternite VII smooth and shiny. Genitalia.-Genital plates: Gonocoxae I enlarged dorso-ventrally, slender, straight, in caudal view with upper third opened and lower third closed, and in lateral view with external face straight and ventrally rounded (Figs. 9-10). Spermatheca: Figs. 30-31.

Variation.—1, Head in dorsal view yellow with middle third including the interocellar space black to dark brown. 2, Rostral segment I yellow with apical third black or dark brown. 3, Calli and middle third of pronotal disc pale yellow to yellowish brown. 4, Femora yellow with three or four irregular rings and several discoidal spots dark red brown. 5, Abdominal sternite with the pleural margin bright orange red, except the posterior third yellow. 6, Punctures black to red brown. 7, Following areas dark orange: posterior third of pronotal disc, and anterior half of scutellar disc.

Type material.—Holotype: δ , Fiji, Taveuni, Des Voeux Peak rd., (900–1100 m), 16 July 1987, G. Monteith and D. Cook (QMBA). Paratypes: $6 \ \delta \ \delta$, $9 \ \varphi \ \varphi$, Fiji, Taveuni, Des Voeux Peak rd., (900–1100 m), 16 July 1987, G. Monteith and D. Cook (QMBA, UNAM); 1 $\ \varphi$, Fiji, Nagassan, W. M. Mann (BMNH).

Notes.-This species is similar in color and habitus to B. variegata (Le Guillou). In B. taveuni Brailovsky, new species, the body is stout and ovate, with abdominal sternite VI of the male and V to VII of the female uniformly developed, and the rostrum reaching the abdominal sternite VII. In B. variegata the body is oval to subovate, relatively stout, with abdominal sternite VI of the male clearly constrained at the midline and the abdominal sternite V to VII of the female constrained, decurved and narrowed at the midline with the rostrum shorter, and not extending beyond abdominal sternite VI. In addition, the calli and arms of T-shaped ridge on the scutellar disc of B. variegata are weakly elevated, with the apex of parameres shorter (Figs. 24-27).

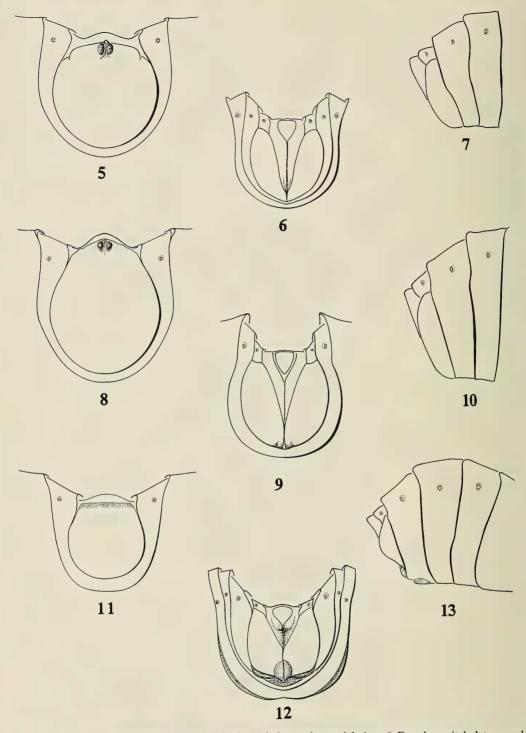
Etymology.—Named for the type locality; a noun in apposition.

Distribution.—Known only from the Fiji Islands.

Brachylybas delgadoi Brailovsky, New Species (Figs. 3, 5–7)

Description.—Male: Head length 1.60; width across eyes 1.52; interocular space 0.80; interocellar space 0.48; preocular distance 0.98; postocular distance 0.21; length of antennal segments: I, 1.68; II, 2.10; III,

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Figs. 5–13. 5–7, *Brachylybas delgadoi*. 5, Male genital capsule, caudal view. 6, Female genital plates, caudal view. 7, Female genital plates, lateral view. 8–10, *B. taveuni*. 8, Male genital capsule, caudal view. 9, Female genital plates, caudal view. 10, Female genital plates, lateral view. 11–13, *B. vanua*. 11, Male genital capsule, caudal view. 12, Female genital plates, caudal view. 13, Female genital plates, lateral view.

1.52; IV, 1.60. Pronotum: Length of anterior lobe 0.80; length of posterior lobe 1.24; width of anterior lobe 1.80; width of posterior lobe 3.24. Scutellar length 1.50; width 1.64. Abdomen: Maximum width 3.48. Total body length 8.60.

Female: Head length 1.72; width across eyes 1.64; interocular space 0.86; interocellar space 0.50; preocular distance 1.04; postocular distance 0.17; length of antennal segments: I, 1.76; II, 2.20; III, 1.58; IV, 1.60. Pronotum: Length of anterior lobe 0.80; length of posterior lobe 1.28; width of anterior lobe 1.96; width of posterior lobe 3.48. Scutellar length 1.60; width 1.76. Abdomen: Maximum width 3.92. Total body length 9.65.

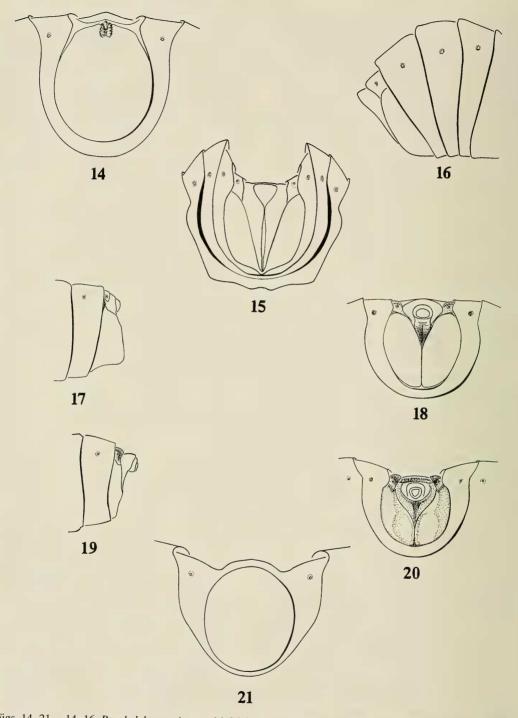
Male.-Dorsal coloration pale shiny orange with following areas pale creamy yellow to yellow: basal third of tylus, a longitudinal band running from lower third of antenniferous tubercle to neck, comprising space between eyes and ocelli and dorsal aspect of postocular tubercle, two discoidal spots located on vertex, lateral margins of pronotal collar, anterolateral margins of pronotum, external edge of humeral angles, greater part of calli, irregular spotting at middle lobe of pronotal disc, scattered spots on scutellar disc, apex of scutellum, costal margin of corium, greater part of apical margin of corium, middle third of clavus, few discoidal spots scattered on exocorium, short longitudinal band of endocorium, and anterior angle and posterior border of connexival segments; antennal segments I to III bright orange (basal join of III yellow), IV shiny orange to pale brown, with middle third vellow; dorsal abdominal segments shiny orange, with punctures darker. Ventral coloration: Head pale shiny orange with following areas pale yellow: area adjacent to eyes, lateral margins of neck, and a longitudinal and slender stripe running below eyes, from antenniferous tubercle to neck; rostral segment I pale brown with subapical ring yellow, II yellow with posterior third pale brown, III and IV yellow; thorax and abdomen yellow with following areas dark red brown: prosternum, punctures, area adjacent to metathoracic peritreme, and space between middle and posterior acetabulae; anterior and posterior lobe of metathoracic peritreme yellow, genital capsule dark orange; coxae shiny dark red with orange reflections; trochanters yellow with shiny dark red reflections; femora shiny red brown with two irregular yellow rings, one subbasal, other near middle third, as well as few discoidal spots scattered on posterior third; tibiae pale orange red with one subbasal yellow ring; tarsal segment I pale orange, II and III pale yellow with apical join or posterior third pale orange.

Male.—Body oblong, not stout. Head: Tylus apically with a spine projection; rostrum reaching anterior or posterior third of abdominal sternite V. Pronotum: Calli weakly elevated, and irregularly rounded at each side. Scutellum: Arms of T-shaped ridge barely elevated. Hemelytra: Macropterous, reaching apex of last abdominal segment; apical corial margin sinuate to straight. Abdomen: Dorsal segments I to VII straight; abdominal sternite III to VII uniformly developed. Genitalia.-Genital capsule: Posteroventral margin with a medial expansion, bearing two short tubercles, separated along midline by a deep longitudinal furrow (Fig. 5).

Female.—Similar to male. Connexival segments VIII and IX pale orange red, with anterior angle and posterior border yellow; dorsal segments VIII and IX shiny orange red; genital plates pale yellow with punctures and few spots orange. Abdomen: Dorsal segments almost straight, not bent downward; abdominal sternite III to VII uniformly developed; middle third of abdominal sternite VII smooth and shiny. Genitalia.—Genital plates: Gonocoxae I enlarged dorso-ventrally, slender, in caudal view almost entirely opened, and in lateral view with lower third strongly exposed (Figs. 6–7).

Variation.—1, Body coloration pale or dark orange or black with yellow marks similar to the general description. 2, Anten-

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Figs. 14–21. 14–16, *Brachylybas variegata*. 14, Male genital capsule, caudal view. 15, Female genital plates, caudal view. 16, Female genital plates, lateral view. 17–18, *Acarihygia fijiana*. 17, Female genital plates, lateral view. 18, Female genital plates, caudal view. 19–21, *Monasavuhygia cordata*. 19, Female genital plates, lateral view. 20, Female genital plates, caudal view. 21, Male genital capsule, caudal view.

nal segment III red brown with basal join yellow. 3, Rostral segment II with external face brown, and internal face yellow. 4, Trochanters yellow with external brown stripe. 5, Tibiae alternating two yellow rings with three pale orange to pale orange brown rings.

Type material.—Holotype: δ , Fiji, Viti Levu, Suva, June 1929, D. Stoner (USNM). Paratypes: 1 δ , 1 \Diamond , Fiji, Viti Levu, Suva, June 1929, D. Stoner (USNM, UNAM); 2 δ , 2 \Diamond , Fiji, Walu Bay, June 1913, D. Stoner (USNM, UNAM); 1 δ , Fiji, Kadavu Mt., Korogatule (near Matasawalevu) (300 m), 4 July 1987, G. B. Monteith (QMBA); 2 δ ; Fiji, Taveuni (L. Tagimaucia track) (300– 400 m), 17 July 1987, G. Monteith and D. Cook (QMBA, UNAM); 2 δ ; Fiji, Vanua Levu, Kontiki (19 km, E of Savusavu) (20 m), 18–19 July 1987, G. Monteith and D. Cook (QMBA).

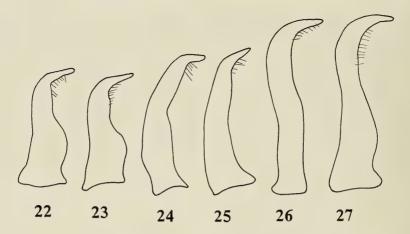
Notes.—This species is similar in color, general habitus, development of the abdomen, and shape of the male genital capsule to *B. taveuni* Brailovsky. In *B. delgadoi* Brailovsky, the body is oblong, not stout, the rostrum is shorter, reaching abdominal sternite V, and the arms of the scutellar disc are barely elevated. In *B. taveuni* the body is ovate and stout, the rostrum reaches abdominal sternite VII and the arms of the scutellar disc are strongly elevated.

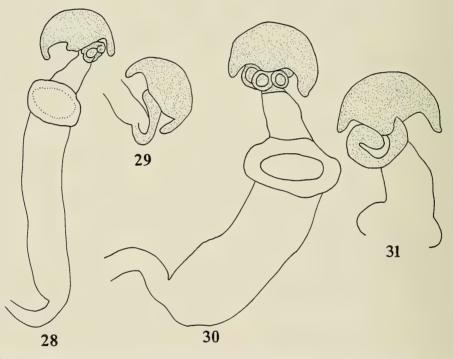
Etymology.—Named for Alfonso Delgado Salinas.

Brachylybas vanua Brailovsky, New Species (Figs. 4, 11–13)

Description.—Male: Head length 1.52; width across eyes 1.50; interocular space 0.78; interocellar space 0.38; preocular distance 1.00; postocular distance 0.15; length of antennal segments: I, 1.64; II, 2.28; III, 1.54; IV, 1.56. Pronotum: Length of anterior lobe 0.80; length of posterior lobe 1.28; width of anterior lobe 1.88; width of posterior lobe 3.20. Scutellar length 1.64; width 1.72. Abdomen: Maximum width 3.16. Total body length 8.45. Female: Head length 1.78; width across eyes 1.72; interocular space 0.86; interocellar space 0.48; preocular distance 1.20; postocular distance 0.25; length of antennal segments: I, 1.80; II, 2.48; III, 1.70; IV, 1.72. Pronotum: Length of anterior lobe 0.88; length of posterior lobe 1.56; width of anterior lobe 2.20; width of posterior lobe 4.04. Scutellar length 1.92; width 2.12. Abdomen: Maximum width 3.24. Total body length 9.90.

Male.—Dorsal coloration black to dark red brown, with following areas pale orange yellow to shiny orange with red reflections: tylus, a longitudinal band running from the antenniferous tubercle to neck, comprising space between eye and ocelli and dorsal aspect of postocular tubercle, two discoidal spots located on vertex, lateral margins of pronotal collar, anterolateral margins of pronotum, external edge of humeral angles, greater part of calli, an irregular spotting at middle lobe of pronotal disc, apex of scutellum, costal margins of corium, and anterior angles and posterior border of connexival segments; antennal segments I and II bright orange, III dark red brown with basal join yellow, and IV dark or pale red brown with middle third pale yellow; hemelytral membrane dark ambarine with veins brown. Ventral coloration: Head black, with following areas yellow to shiny orange: area adjacent to eyes, lateral margins of neck, and a longitudinal and slender stripe running below eyes, from antenniferous tubercle to neck; rostral segment I dark red brown, with subapical vellow ring, II with external face dark red brown and internally yellow, III and IV shiny yellow; thorax, abdomen, and genital capsule orange yellow with following areas black: prosternum, mesosternum, metasternum, area adjacent to metathoracic peritreme, and some punctures; anterior lobe of metathoracic peritreme dirty orange, and posterior lobe red brown; coxae shiny dark red with orange reflections; trochanters yellow with shiny dark reflec-





Figs. 22–31. 22–27, Parameres. 22, 23, Acarihygia fijiana. 24, 25, Brachylybas variegata. 26, 27, B. taveuni. 28–31, Spermatheca. 28, 29, B. variegata. 30, 31, B. taveuni.

tions; femora dark red brown with two irregular yellow rings, one subbasal, other near middle third; tibiae pale red brown to pale red orange brown with two incomplete pale yellow rings; tarsal segment I shiny orange, II and III pale yellow with apical join or posterior third.

Male.—Body oblong, not stout. Head: Tylus apically truncate or bidentate; rostrum reaching anterior third of abdominal sternite VI. Pronotum: Calli weakly elevated, and irregularly rounded at each side. Scutellum: Arms of T-shaped ridge barely elevated. Hemelytra: Macropterous, reaching apex of last abdominal segment; apical corial margin with inner third deeply and broadly concave, Abdomen: Dorsal segments I to VII straight; abdominal sternite III to VII uniformly developed. Genitalia. Genital capsule: Posteroventral margin entire, transversely straight (Fig. 11).

Female.-Similar to male. Connexival segments VIII and IX, black to dark red brown with posterior third yellow; dorsal segments VIII and IX dark red brown; genital plates orange yellow with punctures red brown, Abdomen: Dorsal segments almost straight; abdominal sternite III to VII uniformly developed; middle third of abdominal sternite VII strongly raised. Genitalia.-Genital plates: Gonocoxae I broad, enlarged dorso-ventrally, in caudal view with upper third opened and lower third closed, and in lateral view external face with upper third straight and not exposed and lower third noticeable protruding into large lobes (Figs. 12-13).

Type material.—Holotype: ♂, Fiji, Vanua Levu, Savusavu Labasa Div., (500 m), 20 July 1987, Monteith and Cook (QMBA). Paratypes: 1 ♂, 1 ♀, Fiji, Vanua Levu, Savusavu Labasa Div., (500 m), 20 July 1987, Monteith and Cook (QMBA, UNAM).

Notes .- Brachylybas vanua Brailovsky, is easily distinguished by the shape of the male genital capsule, in which the posteroventral margin is entire and transversely straight (Fig. 11) and the female genital plates gonocoxae I broad, and in lateral view with lower third strongly protruding into large lobes (Figs. 12-13). In addition, the apical margin of corium has the inner third deeply and broadly concave and the middle third of abdominal sternite VII of the female conspicuously emarginate and raised. For the other known Fijian species of Brachylybas, the apical margin of corium is almost straight, or very faintly concave near mesal end, and the middle third of abdominal sternite VII of the female always smooth.

Etymology.—Named for the type locality; a noun in apposition.

Distribution.—Known only from the type locality in the Fiji Islands.

Monasavuhygia Brailovsky, New Genus

Diagnosis.—Acarihygia Brailovsky, like Monasavuhygia Brailovsky, has the ocelli absent, tylus apically globose and truncate, buccula rounded without teeth or spines, abdominal segments IV to VI strongly convex, higher than connexivum, micropterous, legs unarmed, tibiae with indistinct sulcus, pronotum clearly bilobed, and the abdominal sternite VII of the female without plica or fissura. In Acarihygia, the neck of the head is very short, the postocular tubercle moderately protuberant, disc of the scutellum flat, abdomen conspicuously spherical, posterior third of each connexival segment flat, and gonocoxae I squarish, large, and in lateral view, with a convex and protruding external margin (Figs. 17-18). Monasavuhygia is recognized by the neck elongate and straight, postocular tubercle absent, disc of the scutellum with prominent and obtuse tubercle at each side, abdomen not spherical, posterior third of each connexival segments globose, and gonocoxae I in lateral view remarkable flat (Figs. 19-20).

Generic description.-Head: Longer than wide, pentagonal, and dorsally slightly convex; tylus unarmed, apically globose, extending anteriorly to and laterally higher than juga; jugum unarmed, thickened, and conspicuously shorter than tylus; antenniferous tubercle unarmed, globose, diverging anteriorly, with apex truncate; side of head in front of eye unarmed, concave; antennal segment I robust, thickest, slightly curved outward, shorter than head; segments II and III cylindrical and slender; segment IV fusiform; segment II longest, segment III the shortest, and I subequal to IV; ocelli absent; posterior pit between eyes deep; eyes globose, and protuberant; postocular tubercle absent; buccula elevated, short, not projecting beyond antenniferous tubercle, without teeth, and with external edge sinuate; rostrum long, reaching the apex of last abdominal sternite; rostral segment IV longest, segment I the shortest, and II and III sub-

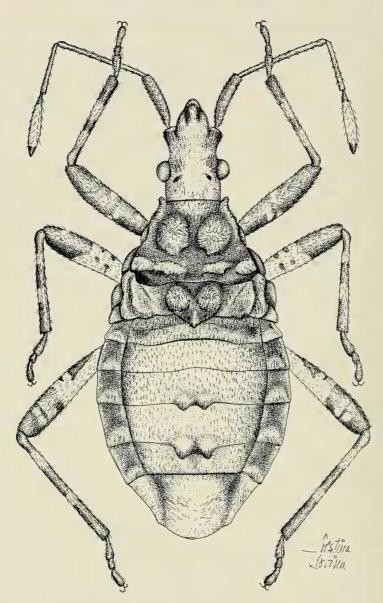


Fig. 32. Monasavuhygia cordata, dorsal view.

equal; rostral segment I reaching posterior gular region; neck elongate, straight.

Thorax: Pronotum wider than long, trapeziform and clearly bilobed; anterior lobe longer than posterior lobe, lateral margin of each convexly rounded; collar wide; frontal angles produced forward as small conical teeth; humeral angles weakly globose, not exposed; posterolateral and posterior border almost straight; disc with large, elevated, irregularly rounded callus at each side, behind anterior margin, and separated along middle line by a longitudinal depression; middle with a pair of basally joined tubercles at each side; posterior lobe with a deep circular depression located medially. Anterior lobe of metathoracic peritreme reniform, posterior lobe sharp, small. Discs of mesopleura and metapleura strongly convex, visible dorsally; posterior border of metathorax with upper third visible dorsallv.

Legs: Unarmed; tibiae cylindrical, longitudinal sulcus indistinct.

Scutellum: Cordiform, wider than long, with a prominent and obtuse tubercle at each side; apex rounded.

Hemelytra: Micropterous; wings reduced to small pads, widely separated; abdomen exposed mesially; clavus and corium fused; membrane absent; disc with two prominent tubercles, one close to middle line, the second at the apical margin.

Abdomen: Abdominal segments IV to VI strongly convex, higher than connexivum; dorsal segment VII flat, with connexival segment VII higher; connexival margin entire, posterior third globose, and posterior angle of each segment not extended into short spine; abdominal sternite with medial sternal furrow projecting to anterior third of sternite V.

Integument: Body rather dull; acetabulae, mesothorax, metathorax, and abdominal sterna polished; thorax, abdominal sternite, and exposed parts of genital segments of both sexes strongly punctate. Head, pronotum, scutellum, hemelytra, and abdominal segments with short, decumbent golden bristlelike setae; abdominal sterna with few long erect setae; antennal segments and legs covered by long and short erect setae.

Male genitalia: Genital capsule simple, globose; posteroventral edge entire, rounded (Fig. 21).

Female genitalia: Abdominal sternite VII entire, without plica or fissura. Genital plates. Gonocoxae I squarish, large, external margin emarginate, and in lateral view flat; paratergite VIII short, with visible spiracle; paratergite IX squarish, larger than paratergite VIII (Figs. 19-20).

Etymology.-Named for its occurrence in Monasavu (Fiji Islands). Gender feminine.

Type species.-Monasavuhygia cordata Brailovsky, new species.

Monasavuhygia cordata Brailovsky, NEW SPECIES (Figs. 19-21, 32)

Description.-Male: Head length 1.84; interocular space 0.80; width across eyes 1.32; preocular distance 1.16; postocular distance 0.36; length of antennal segments: I, 1.12; II, 1.80; III, 1.04; IV, 1.12. Pronotum: Length of anterior lobe 0.92; length of posterior lobe 0.44; width of anterior lobe 1.16; width of posterior lobe 2.36. Scutellar length 0.72; width 1.00. Total body length 8.16.

Female.—Head length 2.00; interocular space 0.84; width across eyes 1.40; preocular distance 1.20; postocular distance 0.46; length of antennal segments: I, 1.20; II, 1.96; III, 1.04; IV, 1.20. Pronotum: Length of anterior lobe 0.96; length of posterior lobe 0.48; width of anterior lobe 1.20; width of posterior lobe 2.56. Scutellar length 0.80; width 1.12. Total body length 8.90.

Male.-Dorsal coloration: Body dark orange brown; antennal segments I to III orange red, and IV yellow with basal join brown. Ventral coloration: Head dark brown, with rostral segments I to IV yellow to pale orange yellow; thorax dark brown with following areas shiny dark orange: acetabulae, mesopleura and metapleura; coxae shiny red brown, with shiny dark orange reflections; trochanters shiny dark orange; fore and middle femora with anterior third of anterior half yellow and scattered with red brown discoidal spots and the rest red brown: hind femora red brown with two incomplete pale yellow rings, one subbasal the other near the middle line (internal side mostly yellow); tibiae alternating two yellow rings with three red brown rings; tarsal segments pale orange yellow; anterior and posterior lobe of metathoracic peritreme dirty orange yellow; abdominal sterna shiny red brown with pleural margins shiny orange yellow; genital capsule dull orange red, scattered with pale orange yellow discoidal spots.

Female.—Dorsal coloration: Head pale orange brown with dirty yellow reflections; antennal segments I to III shiny orange red, and IV yellow with basal join brown; pronotum pale orange to pale yellow with following areas dark red brown: anterior margin, and a wide longitudinal band running between calli and reaching posterior margin; scutellum dark red brown with apex and tubercles shiny orange red; hemelytra dark red brown with tubercles shiny orange vellow; abdomen dark red brown, scattered with few dirty orange yellow discoidal spots; posterior third of each connexival segments dirty orange. Ventral coloration: Similar to male. Genital plates shiny to pale orange yellow, with punctures dark red brown.

Type material.—Holotype: δ , Fiji, Viti Levu Isl., 3 km., East of Monasavu Dam (1000 m), 26 July 1987, Monteith and Cook (QMBA). Paratypes: 2 \Im \Im , Fiji, Viti Levu Isl., 3 km., East of Monasavu Dam (1000 m), 26 July 1987, Monteith and Cook (QMBA, UNAM); 1 \Im , Fiji, Viti Levu Isl., Mt. Victoria (1100–1341 m), 25 July 1987, G. Monteith and Cook (QMBA).

Etymology.—Named for the heartshaped scutellum.

Distribution.—Known only from the type locality in the Fiji Islands.

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LITERATURE CITED

- Blöte, H. C. 1936. Catalogue of the Coreidae in the Rijksmuseum van Natuurlijke Histoire. Part III. Coreinae, Second Part. Zoologische Mededelingen 19: 23–66.
- Brailovsky, H. 1993. New genera and new species of Colpurini (Heteroptera: Coreidae) from the Fiji Islands and New Guinea. Proceedings of the Entomological Society of Washington 95(3): 435–448.
- Brailovsky, H. and J. Martinez, 1994. Revisión del género *Brachylybas* (Hemiptera-Heteroptera: Coreidae: Colpurini). Publicaciones Especiales del Instituto de Biología de la Universidad Nacional Autónoma de México 13: 1–82.
- Kirkaldy, G. W. 1908. A catalogue of the Hemiptera of Fiji. Proceedings of the Linnean Society of New South Wales, Sydney 33(2): 345–391.
- Le Guillou, E. J. F. 1841. La description des hémipteres nouveaux qui'l a recuillis pendant son voyage de circumnavigation sur la corvette La Zélée in III Societés savantes. Revue Zoologie 4: 260– 263.
- Lethierry, L. and G. Severin. 1894. Catalogue general des Hemipteres. Tome II. Heteropteres. F. Hayez, Imprimeur de l'Academie Royale de Belgique, Brussels, 277 pp.
- Stål, C. 1870. Hemiptera insularum Philippinarum. Bidrag till Philippinska öarnes Hemipter-fauna. Öfversigt af Konglika Vetenskaps-Akademiens Förhandlingar, Stockholm 27: 607–776.
- Stål, C. 1873. Enumeratio Hemipterorum, 3. Konglika Svenska Vetenskaps-Akademiens Handlingar 2(2): 33–163.